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## **CLAIMS**

- 1. In a device using HAVi specification protocols, a method for maintaining HEventRepresentation virtual keys, the method comprising:
- from a HAVi level two (L2) graphical user interface (GUI), accessing a JAR file; and,

in response to accessing the JAR file, retrieving virtual key information.

- 10 2. The method of claim 1 wherein accessing a JAR file includes accessing a JAR file stored in read only memory (ROM).
  - 3. The method of claim 2 wherein retrieving virtual key information includes retrieving virtual key information from a JAR file model selected from the group including static classes and data arrays.
  - 4. The method of claim 3 wherein retrieving virtual key information in response to accessing the JAR file includes retrieving a HEventRepresentation application bundled with the virtual key information.
    - 5. The method of claim 4 in which a first microprocessor machine using a first operating system is included; the method further comprising:

      receiving virtual key information as Java source code;

using a Java compiler, compiling the Java source code into Java virtual machine (JVM) byte codes for the first operating system; and,

using jar tools, archiving the JVM byte codes into a JAR file stored in ROM.

6. The method of claim 5 further comprising: receiving the HEventRepresentation application as Java source code;

using a Java compiler, compiling the Java source code into Java virtual machine (JVM) byte codes for the first operating system; and,

using jar tools, archiving the JVM byte codes into a JAR file stored in ROM.

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7. In a device using HAVi specification protocols, a method for maintaining HEventRepresentation virtual keys, the method comprising:

from a HAVi level two (L2) graphical user interface (GUI) accessing a Java input/output (I/O) ResourceBundle; and, in response to accessing the ResourceBundle, retrieving virtual key information.

8. The method of claim 7 wherein accessing the
ResourceBundle includes using a ResourceBundle application
program interface (API) to specify a property file.

9. The method of claim 8 in which a first microprocessor machine using a first operating system is included; the method further comprising:

maintaining a HEventRepresentation application in a protocol associated with the first operating system; and,

wherein accessing the ResourceBundle includes using a ResourceBundle API to specify a property file stored in a file system associated with the first microprocessor machine.

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- 10. The method of claim 9 wherein using a ResourceBundle API to specify a property file stored in the file system includes specifying a property file stored in an input/output (I/O) device selected from the group of storage devices including hard disks and Flash memory.
- 11. The method of claim 10 further comprising:
  receiving virtual key information as text-based properties
  attributes in a ResourceBundle property file;

integrating the virtual key information into a table of virtual key characteristics; and,

storing the virtual key characteristics table as the ResourceBundle property file.

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12. In a device using HAVi specification protocols, a method for maintaining HEventRepresentation virtual keys, the method comprising:

from a HAVi level two (L2) graphical user interface (GUI)

5 calling a Java native interface (JNI);

at the JNI, using Java byte codes to call a storage driver; from the storage driver, accessing a mapped memory; and,

in response to accessing the mapped memory, retrieving virtual key information.

- 13. The method of claim 12 wherein accessing a mapped memory includes accessing a mapped memory stored in an electrically erasable programmable read only memory (EEPROM).
- 14. The method of claim 13 wherein retrieving virtual key information includes retrieving virtual key information from mapped memory in a binary format.
- 20 15. The method of claim 14 wherein using Java byte codes to call a storage driver at the JNI includes converting the Java byte code to binary format addresses; and,

wherein accessing a mapped memory from the storage driver includes using the binary format addresses to access ASCII codes stored in the EEPROM.

16. The method of claim 15 in which a first microprocessor using a first operating system is included; the method further comprising: receiving the storage driver as first operating system

5 machine codes; and,

storing the storage driver as machine code.

17. The method of claim 16 further comprising:
receiving virtual key information as binary format code;
using the storage driver, cross-referencing the virtual key
information with EEPROM addresses; and,

storing the virtual key information in the EEPROM as machine code.

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